

## A NEW SPECIES OF *AGRILUS* CURTIS (COLEOPTERA: BUPRESTIDAE) FROM EASTERN AUSTRALIA

GIANFRANCO CURLETTI

*Museo Civico di Storia Naturale, Parco Cascina Vigna, 10022 Carmagnola, Italy*

*(Email: gianfranco.curletti@yahoo.it)*

### Abstract

*Agrilus (Agrilus) proserpinae* sp. n. is described from Queensland. This new Australian species is easily distinguished by the combination of the elytral pubescence, shape, form and colour.

### Riassunto

È descritto *Agrilus (Agrilus) proserpinae* sp. n. del Queensland (Australia). La nuova specie è inconfondibile per la somma dei caratteri risidenti nella pubescenza elytrale sommata alle dimensioni, alla forma e al colore.

### Introduction

Curletti (2001) revised the Australian *Agrilus* Curtis and published some contributions (2002, 2003, 2007, 2008, 2009) with description of additional species, stating that with little more than fifty species known, the Australian fauna is very poor compared with that of other regions; e.g. a statistical projection for the New Guinean fauna shows an expectation of more than 670 species (Curletti 2006). This depauperate Australian *Agrilus* fauna could be caused by the drift through the South Antarctic area in past geological eras, the consequence being strong impoverishment of thermophilous species such as the ancient groups of BUPRESTIDAE (the presence of the genus *Agrilus* in all regions of the world would prove its presence ever since the time of the Pangaea Continent). Further research may lead to the description of other unknown endemic species, especially in the tropical forests. This paper describes one such new species from the central coast of Queensland.

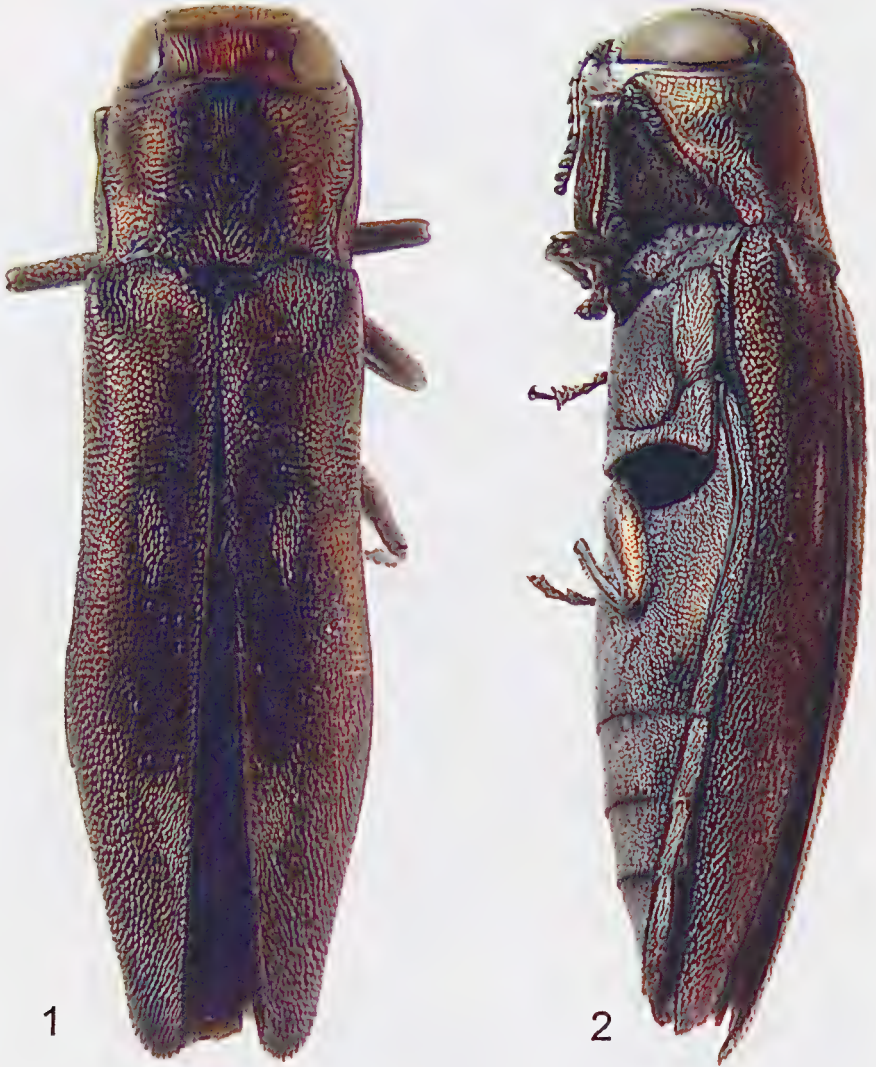
### *Agrilus (Agrilus) proserpinae* sp. n.

(Figs 1-2)

*Type. Holotype* ♀, QUEENSLAND: 20.519°S, 148.557°E, Proserpine, Thompson Creek, site XY15 closed forest, 30 m, 11.xi.2007, C.J. Burwell (Queensland Museum, Brisbane: T156349).

*Description.* Holotype length 8.4 mm; form stumpy; uniformly bronze-brown, less brilliant, with white pubescence on the elytra forming 6 (3+3) round spots: the 1st pair on the humeral calli, the second and the third along the suture before the middle and at the apical three-quarters respectively. The other white pubescence, less brilliant and less dense, uniformly distributed on the elytral apex.

Vertex flat, half width of anterior margin of pronotum, not furrowed, marked by longitudinal sculpture. Frons flat, with brilliant copper reflections. Pubescence black, short, visible in profile only, becoming white and obvious on the genae. Clypeus on the same level of the frons, separated by a small



**Figs 1-2.** *Agrilus (Agrilus) proserpinae* sp. n., holotype. (1) dorsal view; (2) lateral view.

carina. Antennae serrate from antennomere 4. Pronotum with lateral margins less arcuate and posterior angles obtuse. Premarginal carinula entire. Marginal carinae subparallel, separated from base. Disc with a slight depression in the basal half before the scutellum. Sculpture transverse and thickened. Anterior prosternal lobe with anterior margin cut in middle. Prosternal plate parallel-sided. Scutellum transverse, carinate. Elytra with apices rounded and denticulate. Ventral side and legs bronze like the dorsum, uniformly covered with short white pubescence. Last visible ventrite rounded at the apex. All claws mucronate.

*Etymology.* Latinisation of the type locality. In Roman mythology, *Proserpina*, daughter of *Juppiter* and *Demetra*, was the goddess of agriculture and, after being abducted by *Pluto*, became also the queen of Hades.

*Distribution.* Only known from the type locality.

*Comments.* In regards to *A. proserpinae* n. sp., the sum of the characters described – stumpy form, dimensions, vertex, carinae of pronotum, elytral pubescence – makes this species unmistakable within the Australian *Agrilus* fauna. All other species belonging to the subgenus *Agrilus* characterised by three pairs of spots on the elytra, such as *Agrilus aborigines* Curletti, 2001, *Agrilus solemnis* Obenberger, 1924 and *Agrilus funebris* Deyrolle, 1864 (= *Agrilus cairnsensis* Obenberger, 1959), have smaller dimensions and/or elongated form.

### Acknowledgements

I thank Federica Turco and Geoff Monteith (Queensland Museum) for their assistance, and Jessica Goldstein (Museum of Carmagnola) and Geoff Thompson (Queensland Museum) for help with English and photographic editing, respectively.

### References

- CURLETTI, G. 2001. The genus *Agrilus* in Australia. *Jewel Beetles* No. 9: 76 pp.
- CURLETTI, G. 2002. The genus *Agrilus* in Australia. Supplement 1. *Jewel Beetles* 11: 1-4.
- CURLETTI, G. 2003. The genus *Agrilus* in Australia. Supplement 2. A new synonymy. *Rivista piemontese di Storia Naturale* 24: 293-294.
- CURLETTI, G. 2006. The genus *Agrilus* Curtis, 1825 in New Guinea and nearest islands. *Annali del Museo Civico di Storia Naturale "G. Doria"* 98: 157-257.
- CURLETTI, G. 2007. Una nuova specie australiana di *Agrilus* Curtis, 1825 rinvenuta nel corso del progetto "IBISCA Queensland, 2006". *Lambillionea* 107(3): 416-418.
- CURLETTI, G. 2008. Nuove specie di *Agrilus* del Queensland. *Lambillionea* 108(4): 511-516.
- CURLETTI, G. 2009. *Agrilus (Agrilus) sundholmi*, a new *Agrilus* from Australia (Coleoptera: Buprestidae). *Zootaxa* 2137: 66-68.